

Title (en)  
METHOD FOR THE REDUCTION OF NITROGEN OXIDES AND CARBON MONOXIDE IN THE FURNACE CHAMBERS OF WATER AND STEAM BOILERS, PARTICULARLY GRATE BOILERS AND A SYSTEM FOR THE REDUCTION OF NITROGEN OXIDES AND CARBON MONOXIDE IN THE FURNACE CHAMBERS OF WATER AND STEAM BOILERS, PARTICULARLY GRATE BOILERS

Title (de)  
VERFAHREN ZUR REDUKTION VON STICKOXIDEN UND KOHLENMONOXID IN DEN OFENKAMMERN VON WASSER- UND DAMPFKESSELN, INSBESONDERE VON ROSTKESSELN, UND SYSTEM ZUR REDUKTION VON STICKOXIDEN UND KOHLENMONOXID IN DEN OFENKAMMERN VON WASSER- UND DAMPFKESSELN, INSBESONDERE VON ROSTKESSELN

Title (fr)  
PROCÉDÉ POUR LA RÉDUCTION D'OXYDES D'AZOTE ET DE MONOXYDE DE CARBONE DANS LES CHAMBRES DE FOUR DE CHAUDIÈRES À EAU ET À VAPEUR, EN PARTICULIER DES CHAUDIÈRES À GRILLE ET SYSTÈME POUR LA RÉDUCTION D'OXYDES D'AZOTE ET DE MONOXYDE DE CARBONE DANS LES CHAMBRES DE FOUR DE CHAUDIÈRES À EAU ET À VAPEUR, EN PARTICULIER DES CHAUDIÈRES À GRILLE

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Application  
**EP 20020236 A 20200519**

Priority  
PL 42934319 A 20190321

Abstract (en)  
SummaryA method of limiting the formation and/or reduction of nitrogen oxides by injecting process gas into the furnace chamber in the opposite direction to the main direction of the flue gas flowing through the furnace chamber, or in another version, process gas with a reagent is injected at a rate of 30 to 180 m/s, preferably 135 m/s, the injection points being located on the front screen of the furnace chamber, on the rear screen of the furnace chamber, on the upper screen of the furnace chamber and on the side screens of the furnace chamber.A system for the realization of the method according to the invention for NO<sub>x</sub> reduction includes process gas injection lances (6), (10), (12), (16), reagent injection lances (7), (13), (17), furnace chamber (4), process gas intake (18), process gas fan (21), a measuring system mounted on the process gas collector (22), control and cut-off components installed on the process gas collector (23), a reagent tank (24), a reagent pump (25), measuring systems (26) mounted on the reagent installation, control and cut-off elements (27) installed on the reagent installation, a central lance for reagent injection into process gas (28), a device measuring exhaust gas composition (29) and a controller (30).

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Citation (applicant)  

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- WO 9515463 A1 19950608 - HAGSTROEM ULF [SE], et al
- US 2016003473 A1 20160107 - HILBER THOMAS [DE], et al
- US 2006118013 A1 20060608 - MARX PETER D [US], et al
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- [A] CN 101545630 A 20090930 - NINGBO YINUO ENERGY TECHNOLOGY
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- [A] CN 106051749 A 20161026 - QINGDAO JINTIAN THERMOELECTRIC CO LTD
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